

**FRESNO, CALIFORNIA  
CLASS SPECIFICATION**

**SENIOR WATER SYSTEMS TELEMETRY & DISTRIBUTED CONTROL  
SPECIALIST**

**FLSA STATUS:**

Non-Exempt

**CLASS SUMMARY:**

The Senior Water Systems Telemetry & Distributed Control Specialist is the third level in a three level Utilities Telemetry Systems series. Incumbents are responsible for serving as a lead worker and for performing complex assignments in the administration, maintenance, and operation of computerized distributed control, telemetry, **SCADA**, and other computerized network systems that require extensive technical knowledge, initiative, discretion, and judgment.

Incumbents in the classification will be required to be on standby duty on a rotating basis to respond to emergencies.

The Senior Water Systems Telemetry & Distributed Control Specialist is distinguished from the Water Systems Telemetry & Distributed Control Specialist by its responsibility for making work assignments, designing and implementing security remote access to SCADA/distributed control system, overseeing the work of technicians, training, preparing reports, and performing administrative tasks in the absence of the supervisor.

Deleted: ordering and distributing supplies,

**TYPICAL CLASS ESSENTIAL DUTIES:** (These duties are a representative sample; position assignments may vary.)

**FRE-  
QUENCY**

1. Serves as a lead worker to other employees, which includes: prioritizing and assigning work; determining completion of work; and training staff on work methods.
2. Installs, configures, maintains, and troubleshoots workstation problems related to hardware and software.
3. Programs various PLCs, including Modicon, GE, and Allen Bradley equipment.
4. Performs a variety of administrative tasks in support of division operations, which may include: coordinating telephone and radio changes, upgrades, and repairs; installing and configuring various software applications; planning for future distributed control and network expansions; installing, maintaining, distributing, and configuring proximity badge access systems; assigning work orders; and/or, performing other related activities.
5. Designs, installs, configures, operates and maintains HMI application software, such as Factory Link and RSView32.

Daily  
10%

Deleted: ,

Daily  
~~10~~ - 20%

Daily  
~~0~~ - 25%

Deleted: 1

Daily  
10 - ~~25~~%

Daily  
~~10~~ - 25%

Deleted: M

**FRESNO, CALIFORNIA  
CLASS SPECIFICATION**

**SENIOR WATER SYSTEMS TELEMETRY & DISTRIBUTED CONTROL  
SPECIALIST**

6.	Installs, configures, and maintains applicable computer servers, switches, and routers.	<del>Weekly</del> <del>5 - 25%</del>	Deleted: Dai
<b>TYPICAL CLASS ESSENTIAL DUTIES:</b> (These duties are a representative sample; position assignments may vary.)		<b>FRE- QUENCY</b>	
7.	<del>Installs, configures, and maintainins applicable databases such as Oracle and SQL.</del>	Daily <del>5 - 10%</del>	Deleted: Maintains, installs, and configures applicable databases.
8.	Monitors and maintains hardware and software inventory and notifies appropriate internal staff of replenishment and/or replacement needs.	Daily 5%	
9.	<del>Designs, installs, and maintains radio telemetry systems.</del>	<del>Weekly</del> <del>5 - 10%</del>	Deleted: M
10.	Designs, installs, and maintains distributed control systems.	Monthly <del>5 - 10%</del>	Deleted: for reclamation well systems
11.	Designs, installs, configures, and maintains CCTV system and associated servers.	Monthly <del>5 - 10%</del>	
12.	Installs, maintains, and configures applicable networks, including Control Net, <del>Modbus, Modbus TCP,</del> Modbus Plus, and programmable logic controllers (PLCs).	Monthly 5%	
13.	Designs, installs, maintains, and configures network infrastructures <del>and applications.</del>	Monthly 5%	
14.	Performs other duties of a similar nature or level.	As Required	Formatted Table
	<del>Orders and maintains inventory for a variety of supplies and equipment; prepares purchase orders; and assists in budget planning related to IT planning.</del>	<del>Daily</del> <del>5%</del>	
	<del>Coordinates and oversees special projects.</del>	<del>Monthly</del> <del>10%</del>	
	<del>Documentation of systems, services, SCADA, distributed control, and security.</del>	<del>Monthly</del> <del>5 - 10%</del>	Formatted Table

**FRESNO, CALIFORNIA  
CLASS SPECIFICATION**

**SENIOR WATER SYSTEMS TELEMETRY & DISTRIBUTED CONTROL  
SPECIALIST**

<u>Monitors network services, systems, and security.</u>	<u>Daily</u>
<u>Conducts presentations and end-user training.</u>	<u>5 – 10%</u>
	<u>As required</u>

**Training and Experience** (positions in this class typically require):

- Two years of experience as a Water Systems Telemetry and Distributed Control Specialist with the City of Fresno or a Bachelor's Degree in Computer Science, Engineering, Water Science, or related field and two years of increasingly responsible experience in LAN administration, computer programming, SCADA/Telemetry system management, distributed control systems, or Process Control Instrumentation are required;

OR

- An equivalent combination of education and experience sufficient to successfully perform the essential duties of the job such as those listed above. Additional qualifying experience may be substituted for the required education on a year-for-year basis.

Deleted:

**Licensing Requirements** (positions in this class typically require):

Some positions, based on assignment, may require:

- Basic Class C License
- MCSA or MCSE certification is desirable:
- CCNA or CCNP certification is desirable:
- OCP certification is desirable.

Formatted: Bullets and Numbering

Positions in the Water Division will require a State of California Water Distribution D-2 Certification within 18 months of appointment.

**FRESNO, CALIFORNIA  
CLASS SPECIFICATION**

**SENIOR WATER SYSTEMS TELEMETRY & DISTRIBUTED CONTROL  
SPECIALIST**

---

**Knowledge** (position requirements at entry):

Knowledge of:

- Prioritizing and assigning work; detail oriented and ability to multi-task
- Training employees in proper work methods
- Using computers and applicable software applications
- Hardware and software debugging
- Prepare and proofread clear, concise, and comprehensive reports, records, and other written documents
- Programming and maintaining PLCs, associated hardware, and network systems
- Designing, implementing, and maintaining database environments and associated tools and services
- Implementing configuration changes to applicable switches and routers
- Communication, interpersonal skills as applied to interaction with coworkers, supervisor, the general public, business, organizations, elected and appointed officials, media, etc. sufficient to exchange or convey information, give/receive work direction

**Skills** (position requirements at entry):

Skill in:

- Prioritizing and assigning work;
- Training employees in proper work methods;
- Using a computer and related software applications;
- Hardware and software debugging;
- Preparing clear, concise, and comprehensive reports, records, correspondence, and other written documents;
- Programming and maintaining PLCs, associated hardware, and network systems;
- Installing and configuring server services;
- Implementing configuration changes to applicable switches and routers;
- Communication and interpersonal skills as applied to interaction with coworkers, supervisor, the general public, etc. sufficient to exchange or convey information and to receive work direction.

Formatted: Underline

Formatted: Bullets and Numbering

**FRESNO, CALIFORNIA**  
**CLASS SPECIFICATION**

**SENIOR WATER SYSTEMS TELEMETRY & DISTRIBUTED CONTROL  
SPECIALIST**

---

**Physical Requirements:**

Positions in this class typically require: feeling, finger dexterity, grasping, hearing, repetitive motions, seeing, talking, bending, kneeling, lifting, reaching, standing, stooping, walking, balancing, climbing, crawling, crouching, pulling and pushing.

Very Heavy Work: Exerting up to 100 pounds of force occasionally, and/or in excess of 50 pounds of force frequently, and/or in excess of 20 pounds of force constantly to move objects.

Incumbents may be subjected to moving mechanical parts, electrical hazards, vibrations, fumes, odors, dusts, poor ventilation, adverse weather conditions, environmental hazards, gasses, chemicals, oils, work space restrictions, inadequate lighting, intense noises and travel.

**Note:**

The above job description is intended to represent only the key areas of responsibilities; specific position assignments will vary depending on the business needs of the department.

**Classification History:**

Draft prepared by Fox Lawson & Associates (LM)  
Date: 12/2007